## UNITED STATES DISTRICT COURT WESTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

UNITED STATES OF AMERICA,		
Plaintiff,	) )	
V.	) Civil Action No	Ο.
MERIT ENERGY COMPANY, LLC,	)	
Defendant.	)	
Defendant.	<i>)</i> )	

### **COMPLAINT**

Plaintiff, the United States of America, by and through the Attorney General of the United States and his designee, Patrick A. Miles, Jr., United States Attorney for the Western District of Michigan, acting at the request and on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), files this complaint and alleges as follows:

### **NATURE OF ACTION**

1. This is a civil action brought against Merit Energy Company, LLC ("Merit"), pursuant to Section 113(b) of the Clean Air Act (the "CAA"), as amended 42 U.S.C. § 7413(b), to obtain civil penalties for violations of Section 111(e) of the CAA, 42 U.S.C. § 7411(e). Specifically, Merit is violating the Standards of Performance for Equipment Leaks of Volatile Organic Compounds ("VOC") From Onshore Natural Gas Processing Plants at 40 C.F.R. §§ 60.630–60.636 ("Subpart KKK"), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry ("Subpart VV"), and Method 21–Determination of VOC Leaks at 40 C.F.R. Part 60 Appendix A ("Method 21"). The violations alleged in the Complaint occurred at Merit's Kalkaska Gas Plant located in Kalkaska, Michigan.

## **JURISDICTION AND VENUE**

- 2. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331, 1345, and 1355 and under Section 113(b) of the CAA, 42 U.S.C. § 7413(b).
- 3. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391, 1395, and under Section 113(b) of the CAA, 42 U.S.C. § 7413(b), because Defendant resides within this District and because the violations that constitute the basis of this Complaint occurred at a plant located in this District.

### **NOTICE**

4. The United States has provided notice of the commencement of this action to the State of Michigan as required by Section 113(b) of the CAA, 42 U.S.C. § 7413(b).

## **AUTHORITY**

5. The United States has authority to bring this action on behalf of the Administrator of EPA under 28 U.S.C. §§ 516, 519 and Section 305 of the CAA, 42 U.S.C. § 7605.

#### **DEFENDANT**

- 6. Merit is incorporated and registered to do business in the State of Michigan. Merit owns and operates the Kalkaska Gas Plant ("KGP" or "Merit KGP"), an onshore natural gas processing plant, at 1080 Prough Road SW, Kalkaska, Michigan. At KGP, Merit removes natural gas liquids from field gas and fractionates the natural gas liquids.
- 7. Merit is a "person" within the meaning of Section 302(e) of the CAA, 42 U.S.C. § 7602(e).

## STATUTORY AND REGULATORY BACKGROUND

8. The CAA establishes a regulatory scheme designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. 42 U.S.C. § 7401(b)(1).

## I. New Source Performance Standards

#### A. General Provisions

- 9. Section 111 of the CAA, 42 U.S.C. § 7411, authorizes EPA to promulgate regulations establishing New Source Performance Standards ("NSPS").
- 10. Section 111(e) of the CAA, 42 U.S.C. § 7411(e), states that after the effective date of standards of performance promulgated under Section 111, it shall be unlawful for any owner or operator of any new source to operate such source in violation of any standard of performance applicable to such source.
- 11. The term "standard of performance" is defined as a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. 42 U.S.C. § 7411(a)(1).
- 12. The term "new source" is defined as any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance under this section that will be applicable to such source. 42 U.S.C. § 7411(a)(2).

- 13. The term "stationary source" is defined as any building, structure, facility, or installation that emits or may emit any air pollutant. 42 U.S.C. § 7411(a)(3).
- 14. The term "modification" means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emissions of any air pollutant not previously emitted. 42 U.S.C. § 7411(a)(4).
- 15. The term "owner or operator" is defined as any person who owns, leases, operates, controls, or supervises a stationary source. 42 U.S.C. § 7411(a)(5).

### B. Subpart KKK

- 16. Subpart KKK, at 40 C.F.R. §§ 60.630(a)(1) and (3), applies to all equipment except compressors within a process unit in onshore natural gas processing plants.
- 17. Subpart KKK, at 40 C.F.R. § 60.630(b), specifies that any affected facility that commences construction, reconstruction, or modification after January 20, 1984 and on or before August 23, 2011, is subject to the requirements of this subpart.
- 18. Subpart KKK, at 40 C.F.R. § 60.631, defines "process unit" as equipment assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products.
- 19. Subpart KKK, at 40 C.F.R. § 60.631, defines "equipment" as each pump, pressure relief device, open-ended valve or line, valve, compressor, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by Subpart KKK.
- 20. Subpart KKK, at 40 C.F.R. § 60.631, defines "onshore" as all facilities except those that are located in the territorial seas or on the outer continental shelf.

21. Subpart KKK, at 40 C.F.R. § 60.632(a), (d), and (e), specifies the provisions of Subpart VV that apply to owners and operators of affected facilities under Subpart KKK and requires compliance with those Subpart VV provisions no later than 180 days after initial startup.

## C. Subpart VV

- 22. Subpart VV applies to affected facilities in the synthetic organic chemicals manufacturing industry. 40 C.F.R. § 60.480(a)(1).
- 23. Subpart VV Sections 60.482-1(a), (b) and (d), Sections 60.482-2 through 60.482-10, and Sections 60.485, 60.486 and 60.487, except as provided in Sections 60.633(f), 60.633, 60.635 and 60.636, apply to affected facilities in onshore natural gas processing plants. 40 C.F.R. §§ 60.630(a), 60.632(a), (d), and (e).
- 24. Subpart VV, at 40 C.F.R. § 60.482-1, sets forth general standards for owners and operators subject to Subpart VV and, among other things, specifies at 40 C.F.R. § 60.482-1(b) that methods of compliance determination include review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 C.F.R. § 60.485.
- 25. Subpart VV, at 40 C.F.R. § 60.482-6, sets forth standards for open-ended valves or lines, including the requirement at § 60.482-6(a)(2) that a cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
- 26. Subpart VV, at 40 C.F.R. § 60.482-7, sets forth standards for valves in gas/vapor and in light liquid service, including the requirement at 40 C.F.R. § 60.482-7(a)(1) that each valve be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 60.485(b) and that each valve shall comply with 40 C.F.R. § 60.482-7(b)–(e). 40 C.F.R. § 60.482-7(a)(1).

- 27. Subpart VV, at 40 C.F.R. § 60.482-7(c)(2), specifies that any valve being monitored quarterly that is found to be leaking, must be monitored monthly until a leak is not detected for two successive months.
- 28. Subpart VV, at 40 C.F.R. § 60.485(b), requires owners and operators to determine compliance with applicable standards using Method 21.
- 29. Subpart VV, at 40 C.F.R. § 60.485(b)(1), requires that the instrument used to perform Method 21 shall be calibrated before use each day of its use by procedures specified in Method 21.
- 30. The NSPS Appendix A, at 40 C.F.R. Part 60, Method 21, §§ 8.1.1.1, 8.2, and 10.1, specify the calibration procedures for the instrument used to detect leaks.
- 31. The NSPS Appendix A, at 40 C.F.R. Part 60, Method 21, §§ 8.3.1 and 8.3.1.1, sets forth the technique which must be used to determine if there is a leak from a valve.
- 32. Subpart VV, at 40 C.F.R. § 60.486(b), sets forth requirements for identification of leaking components.
- 33. Subpart VV, at 40 C.F.R. § 60.486(e)(1), sets forth the recordkeeping requirements for identifying all equipment subject to the standards in 40 C.F.R §§ 60.482-1 to 60.482-10.

### **II.** Enforcement Provisions

- 34. Section 113 of the CAA, 42 U.S.C. § 7413, authorizes EPA to commence a civil action for injunctive relief and/or civil penalties against any person who has violated any requirement or prohibition of the CAA or regulations promulgated thereunder, or who has violated any applicable permit or implementation plan.
- 35. Pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), as amended by the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 and the Debt

Collection Improvement Act, 31 U.S.C. § 3701 and 40 C.F.R. § 19.4, EPA may seek penalties of up to \$37,500 per day for violations of the CAA that occurred after January 12, 2009.

## **General Allegations**

- 36. Merit is the "owner or operator," as defined in Section 111(a)(5) of the CAA, 42 U.S.C. §7411(a)(5), of KGP, an onshore natural gas processing plant in Kalkaska, Michigan.
- 37. The Michigan Department of Environmental Quality issued a final Title V permit, Renewable Operating Permit MI-ROP-B4292-2008, to Merit for KGP, effective May 28, 2008, which was renewed on November 10, 2014, as Renewable Operating Permit MI-ROP-B4292-2014 (the "ROP").
- 38. Merit's ROP specifies that the KGP fractionation plant was installed on January 1, 1972, and was modified on March 28, 2007.
- 39. Merit KGP is a "new source" within the meaning of Section 111(a)(2), 42 U.S.C. § 7411(a)(2).
- 40. Merit KGP is a "stationary source" within the meaning of Sections 111(a)(3) and 302(z) of the CAA, 42 U.S.C. §§ 7411(a)(3), 7602(z).
- 41. Merit KGP is subject to the requirements at 40 C.F.R. Part 60, Part KKK, and those provisions of Subpart VV that are referenced in Subpart KKK.
- 42. On or about November 6 and 7, 2012, EPA conducted a CAA inspection of Merit KGP (the "November 2012 Inspection") and performed monitoring for leaks on valves using Method 21.
- 43. On or about November 6, 2012, NTH Consultants, Ltd. ("NTH"), Merit's consulting company, also performed leak monitoring of certain valves at Merit KGP.

- 44. For the eight periodic monitoring events since April 2008, Merit reported an average of 0.3% as the percentage of valves leaking in its semiannual reports.
  - 45. EPA found a 3.8% valve leaking rate during the November 2012 Inspection.

# FIRST CLAIM FOR RELIEF Failure to Seal Each Open-Ended Valve

- 46. Plaintiff realleges and incorporates by reference Paragraphs 1 through 45 as if fully set forth within.
- 47. The Equipment Leaks of VOC from Onshore Natural Gas Processing Plants Standards of Subpart KKK require that each owner or operator subject to the provisions of that subpart must comply with the requirements of 40 C.F.R. §§ 60.482-1(a), (b), and (d) and 40 C.F.R. 60.482-2 through 60.482-10, as soon as practicable, but no later than 180 days after initial startup. 40 C.F.R. § 60.632(a).
- 48. The Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry of Subpart VV require that each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. 40 C.F.R. § 60.482-6(a).
- 49. During the November 2012 Inspection, EPA discovered that Merit failed to seal each open-ended valve, specifically tag number K185.
- 50. Therefore, Merit violated Section 111(e) of the CAA, 42 U.S.C. § 7411(e), and 40 C.F.R. § 60.632(a) (and by reference 40 C.F.R. § 60.482-6(a)).
- 51. As provided in Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and 40 C.F.R. Part 19, the violations set forth above subject Merit to injunctive relief and civil penalties of up to \$37,500 per day for each violation occurring on or after January 12, 2009.

#### SECOND CLAIM FOR RELIEF

## Failure to Identify Regulated Equipment and Properly Perform Method 21 Monitoring

- 52. Plaintiff realleges and incorporates by reference Paragraphs 1 through 51 as if fully set forth within.
- 53. The Equipment Leaks of VOC from Onshore Natural Gas Processing Plants Standards of Subpart KKK require that each owner or operator subject to the provisions of Subpart KKK shall comply with the requirements of 40 C.F.R. §§ 60.482-1 (a), (b), and (d) and 40 C.F.R. §§ 60.482-2 through 60.482-10, as soon as practicable, but no later than 180 days after initial startup. 40 C.F.R. § 60.632(a).
- 54. The Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry of Subpart VV require that each valve be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 60.485a(b) and require compliance with 40 C.F.R. § 60.482-7a(b) through (e). 40 C.F.R. § 60.482-7a(a)(1).
- 55. During the November 2012 Inspection, EPA discovered that Merit failed to perform Method 21 monitoring on each valve in gas/vapor and/or light liquid service.
- 56. Therefore, Merit violated Section 111(e) of the CAA and 40 C.F.R. § 60.632(a) (and by reference 40 C.F.R. § 60.482-7(a)(1)).
- 57. As provided in Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and 40 C.F.R. Part 19, the violations set forth above subject Merit to injunctive relief and civil penalties of up to \$37,500 per day for each violation occurring on or after January 12, 2009.

# THIRD CLAIM FOR RELIEF Failure to Calibrate Prior to Performing Method 21 Monitoring

58. Plaintiff realleges and incorporates by reference Paragraphs 1 through 57 as if fully set forth within.

- 59. The Equipment Leaks of VOC from Onshore Natural Gas Processing Plants Standards of Subpart KKK require each owner or operator subject to the provisions of Subpart KKK to comply with the provisions of 40 C.F.R. § 60.485. 40 C.F.R. § 60.632(d).
- 60. Subpart VV, at 40 C.F.R. § 60.485(b)(1), requires that the instrument used to perform Method 21 be calibrated before use each day of its use by procedures specified in Method 21.
- 61. The NSPS Appendix A, at 40 C.F.R. Part 60, Method 21 §§ 8.1.1.1, 8.2, and 10.1, specify the calibration procedures for the instrument used to detect leaks.
- 62. Prior to the November 2012 Inspection, Merit failed to calibrate the instrument used for Method 21 for each day of use pursuant to 40 C.F.R. §§ 60.485(b)(1) and Method 21, §§ 8.1.1.1, 8.2, and 10.1.
- 63. Therefore, Merit violated Section 111(e) of the CAA and 40 C.F.R. § 60.632(d) (and by reference 40 C.F.R. § 60.485(b)(1) and Method 21, §§ 8.1.1.1, 8.2, and 10.1).
- 64. As provided in Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and 40 C.F.R. Part 19, the violations set forth above subject Merit to injunctive relief and civil penalties of up to \$37,500 per day for each violation occurring on or after January 12, 2009.

# FOURTH CLAIM FOR RELIEF Failure to Perform Method 21 Monitoring Correctly on Valves

- 65. Plaintiff realleges and incorporates by reference Paragraphs 1 through 64 as if fully set forth within.
- 66. The Equipment Leaks of VOC from Onshore Natural Gas Processing Plants Standards of Subpart KKK require each owner or operator subject to the provisions of Subpart KKK to comply with the provisions of 40 C.F.R. § 60.485. 40 C.F.R. § 60.632(d).
  - 67. Subpart VV, at 40 C.F.R. § 60.485(b)(1), requires that the instrument used to

perform Method 21 be calibrated before use each day of its use by procedures specified in Method 21.

- 68. The NSPS Appendix A, at 40 C.F.R. Part 60, Method 21, §§ 8.3.1 and 8.3.1.1 sets forth the technique required to determine if there is a leak from a valve.
- 69. Based on EPA's observations during the November 2012 inspection and the facts alleged in Paragraphs 44 and 45 above, Merit failed to perform Method 21 properly on valves.
- 70. Therefore, Merit violated Section 111(e) of the CAA and 40 C.F.R. § 60.632(d) (and by reference 40 C.F.R. § 60.485(b)(1) and Method 21, §§ 8.3.1 and 8.3.1.1).
- 71. As provided in Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and 40 C.F.R. Part 19, the violations set forth above subject Merit to injunctive relief and civil penalties of up to \$37,500 per day for each violation occurring on or after January 12, 2009.

## FIFTH CLAIM FOR RELIEF Failure to Perform Method 21 Monitoring Correctly on Insulated Valves

- 72. Plaintiff realleges and incorporates by reference Paragraphs 1 through 71 as if fully set forth within.
- 73. The Equipment Leaks of VOC from Onshore Natural Gas Processing Plants Standards of Subpart KKK require each owner or operator subject to the provisions of Subpart KKK to comply with the provisions of 40 C.F.R. § 60.485. 40 C.F.R. § 60.632(d).
- 74. The Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry of Subpart VV require that each valve be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 60.485a(b) and require compliance with paragraphs (b) through (e) of Section 60.482-7a. 40 C.F.R. § 60.482-7a(a)(1).
- 75. Subpart VV, at 40 C.F.R. § 60.485(b), requires owners and operators to determine compliance with applicable standards using Method 21.

- 76. The NSPS Appendix A, at 40 C.F.R. Part 60, Method 21, §§ 8.3.1 and 8.3.1.1, sets forth the technique which must be used to determine if there is a leak from a valve.
- 77. During the November 2012 Inspection, EPA discovered that Merit was unable to properly monitor valves that are insulated because the probe inlet did not reach the surface of the component interface where leakage could occur.
- 78. Therefore, Merit violated Section 111(e) of the CAA and 40 C.F.R. § 60.632(d) (and by reference 40 C.F.R. § 60.485(b)(1) and Method 21, §§ 8.3.1 and 8.3.1.1).
- 79. As provided in Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and 40 C.F.R. Part 19, the violations set forth above subject Merit to injunctive relief and civil penalties of up to \$37,500 per day for each violation occurring on or after January 12, 2009.

# SIXTH CLAIM FOR RELIEF Failure to Physically Tag All Leaking Valves

- 80. Plaintiff realleges and incorporates by reference Paragraphs 1 through 79 as if fully set forth within.
- 81. The Equipment Leaks of VOC from Onshore Natural Gas Processing Plants Recording Keeping Requirements of Subpart KKK require each owner or operator subject to the provisions of Subpart KKK to comply with the requirements of paragraphs (b) and (c) of 40 C.F.R. § 60.635 in addition to the requirements of 40 C.F.R. § 60.486. 40 C.F.R. § 60.635(a).
- 82. Subpart KKK contains certain recordkeeping requirements that obligate each owner or operator subject to the provisions of Subpart KKK to ensure that when each leak is detected as specified in 40 C.F.R. § 60.633(b)(2), a weatherproof and readily visible identification, marked with the equipment identification number, be attached to the leaking equipment. 40 C.F.R. § 60.635(b).

- 83. The Equipment Leaks of VOC from Onshore Natural Gas Processing Plants Standards of Subpart KKK require each owner or operator subject to the provisions of that subpart to comply with the provisions of 40 C.F.R. §§ 60.486 and 60.487. 40 C.F.R. § 60.632(e).
- 84. The Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry Record Keeping Requirements of Subpart VV require the owner operator to ensure that when each leak is detected as specified in 40 C.F.R. §§ 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2 a weatherproof and readily visible identification, marked with the equipment identification number, be attached to the leaking equipment and only removed after the leaking equipment has been monitored for two successive months as specified in 40 C.F.R. § 60.482-7(c) and no leak has been detected during those two months.
- 85. During the November 2012 inspection, EPA discovered that Merit failed to tag leaking valves. Leaks not tagged include, but are not limited to, valves K011, K025, K184, K201, K219, K223, K232, K238, K431, K480, K543, K552, K563, and K637.
- 86. Therefore, Merit violated Section 111(e) of the CAA and 40 C.F.R. §§ 60.632(e), 60.635(a) (and by reference 40 C.F.R. § 60.486(b)).
- 87. As provided in Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and 40 C.F.R. Part 19, the violations set forth above subject Merit to injunctive relief and civil penalties of up to \$37,500 per day for each violation occurring on or after January 12, 2009.

### **PRAYER FOR RELIEF**

WHEREFORE, based upon all the allegations contained in Paragraphs 1 through 87 above, the United States of America requests that this Court:

- 1. Permanently enjoin Defendant from operating KGP except in accordance with the CAA and any applicable regulatory requirements;
- 2. Order Defendant to achieve, maintain, and demonstrate compliance with the CAA and applicable requirements established thereunder, including provisions of the Title V permit requirements described above;
- 3. Order Defendant to take other appropriate actions to remedy, mitigate, and offset the harm to public health and the environment caused by the violations of the CAA alleged above;
- 4. Assess a civil penalty against Merit of up to \$37,500 per day for each violation that occurred on and after January 13, 2009;
  - 5. Award Plaintiff its costs of this action; and
  - 6. Grant such other relief as the Court deems just and proper.

Dated: May 1, 2015

Respectfully submitted,

#### FOR THE UNITED STATES OF AMERICA

/s/ Thomas A. Mariani, Jr.\_\_\_\_

THOMAS A. MARIANI, JR.
Deputy Chief
Environmental Enforcement Section
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/s/ Jeffrey A. Spector

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## OF COUNSEL:

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